REMARKS

The Office Action dated June 13, 2002 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 2, 4-7, 12, 26 and 45-47 are pending. By this Amendment, the Sequence Listing in the specification is replaced and claims 2, 4, 5, 7, 26 and 45-46 are amended. No new matter is added.

Allowable Subject Matter

Applicants thank the Examiner for the indication that claims 2, 4-5, 7, 26 and 45-46 contain allowable subject matter.

Information Disclosure Statement

The Examiner asserts that the Information Disclosure Statement filed December 27, 2001 fails to comply with 37 C.F.R. § 1.98(a)(3). In particular, the Examiner notes that the reference EP 0676 468 A2 is not in English. Applicants have attached hereto an English language Abstract of EP 0676 468 A2 along with a copy of the PTO Form-1449 listing the reference EP 0676 468 A2. It is respectfully requested that the Examiner indicate that the reference has been considered in the appropriate location on the PTO Form-1449.

Claim Objections

The Examiner objects to the preambles of each of claims 2, 4-5, 7, 26 and 45-46. Applicants have amended these claims as suggested by the Examiner and thus believe

that these objections are overcome.

Specification

The Examiner objects to the Abstract for containing a minor asserted informality. Applicants believe that this objection is overcome with the attached (on a separate sheet) substitute Abstract in which the terminology "new" is deleted.

Sequence Listing

The Examiner requests that an additional SEQ ID NO: tag be provided for each sequence that comprises a unique subset of amino acids defined by X, ...Xn for claims 1 and 4. Applicants have attached hereto appropriate additional SEQ ID NO: tags as requested. It is respectfully submitted that the foregoing amendments and remarks place the application in compliance with 37 CFR 1.821 through 1.825 and no new matter is contained in this amendment.

Enclosed is a computer readable Sequence Listing in MS-DOS format on a 3.5" disk. The file name is 10056407015.APP.

Conclusion

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 01-2300.

Respectfully submitted,

Arent Fox Kintner Plotkin & Kahn

Robert K. Carpenter
Attorney for Applicants
Reg. No. 34,794

1050 Connecticut Ave. NW
Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810

RKC:tdd

Enclosure: Marked-Up Amendments to Claims

MARKED-UP AMENDMENTS TO CLAIMS

2. (Four Times Amended). [Isolated] An isolated nucleic acid which codes for the α chain of a human T cell receptor, a single chain T cell receptor or a soluble T cell receptor fragment and comprises a CDR3 region selected from the group consisting of:

(a) a nucleotide sequence coding for the amino acid sequence (SEQ ID NO: 23)

$$Y\ C\ L\ (X_1 \ldots X_n)\ S\ A\ R\ Q\ L\ T\ F$$

in which $X_1 \ldots X_n$ represents a sequence 3-4 of amino acids, wherein the amino acid sequence $X_1 \ldots X_n$ is selected from the group consisting of the amino acid sequences VGG (SEQ. ID. NO: 46), VLSG (SEQ. ID. NO: 47), ATG (SEQ. ID. NO: 48), VSG (SEQ. ID. NO: 49), DSG (SEQ. ID. NO: 50), VVSG SEQ. ID. NO: 51), ALAG (SEQ. ID. NO: 52), APSG (SEQ. ID. NO: 53) and VGR (SEQ. ID. NO: 54), and

(b) a nucleotide sequence which codes for an amino acid sequence with an equivalent recognition specificity, as achieved with a T cell receptor comprising a CDR3 region with the amino acid sequence of SEQ ID NO. 23, for the peptide component of the T cell receptor ligands;

wherein the CDR3 region is at least 90% identical with the amino sequence of (a).

4. (Four Times Amended) [Nucleic] A Nucleic acid as claimed in claim 2 wherein the amino acid sequence $X_1 \ldots X_n$ is selected from the group consisting of amino acid sequences VGG (SEQ. ID NO: 46), VLSG (SEQ. ID NO: 47) and ATG (SEQ. ID NO: 48).

5. (Three Times Amended) [Vector,] A vector,

wherein

it contains at least one copy of a nucleic acid as claimed in one of the claims 1 to 4.

7. (Four Times Amended) [Cell,] A cell,

wherein

it is transformed with a nucleic acid as claimed in one of the claims 1 to 4 or with a vector as claimed in claim 5.

26. (Four Times Amended) [Pharmaceutical] A pharmaceutical composition which contains as an active component a nucleic acid as claimed in one of the claims 2 or 4, or a cell as claimed in claim 6 or 7 optionally together with other active components as well as common pharmaceutical auxiliary agents, additives or carrier substances.

45. (Amended) [Isolated] An isolated nucleic acid of claim 2 wherein the nucleic acid is purified.

46. (Amended) [Nucleic Acid] A nucleic acid as claimed in claim 2 wherein the CDR3 region is (a).

-- ABSTRACT

The present invention concerns nucleic acid and amino acid sequences of two human T cell receptor and their use for the diagnosis and therapy of carcinomas in particular of kidney cell carcinomas.--